

Product datasheet for **RN214617**

Pttg1 (NM_022391) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pttg1 (NM_022391) Rat Untagged Clone
Tag: Tag Free
Symbol: Pttg1
Synonyms: Pttg
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN214617 representing NM_022391
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGCTACTCTGATCTTTGTTGATAAGGATAACGAAGAGCCAGGCAGCCGTTTGGCATCTAAGGATGGAT
TGAAGCTGGGCTCTGGTGTCAAAGCCTTAGATGGGAAATTGCAGGTTTCAACGCCACGAGTCGGCAAAGT
GTTCCGGTGCCCCAGGCTTGCCTAAAGCCAGCAGGAAGGCTCTGGGAACTGTCAACAGAGTTACTGAAAAG
CCAGTGAAGAGTAGTAAACCCCTGCAATCGAAACAGCCGACTCTGAGTGTGAAAAAGATCACCGAGAAGT
CTACTAAGACACAAGGCTCTGCTCCTGCTCCTGATGATGCCTACCCAGAAATAGAAAAGTTCTTCCCCCTT
CGATCCTCTAGATTTTGAGAGTTTTGACCTGCCTGAAGAGCACCAGATCTCACTTCTCCCCTTGAATGGA
GTGCCCTCATGATCCTGAATGAAGAGAGGGGGCTTGAGAAGCTGCTGCACCTGGACCCCTTCCCCTC
TGCAGAAGCCCTTCTACCGTGGGAATCTGATCCGTTGCCGTCTCCTCCCAGCGCCCTCTCCGCTCTGGA
TGTTGAATTGCCGCTGTTTGTACGATGCAGATATT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_022391
Insert Size: 600 bp
OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_022391.2</u> , <u>NP_071786.1</u>
RefSeq Size:	959 bp
RefSeq ORF:	600 bp
Locus ID:	64193
UniProt ID:	<u>P97613</u>
Cytogenetics:	10q21
Gene Summary:	Regulatory protein, which plays a central role in chromosome stability, in the p53/TP53 pathway, and DNA repair. Probably acts by blocking the action of key proteins. During the mitosis, it blocks Separase/ESPL1 function, preventing the proteolysis of the cohesin complex and the subsequent segregation of the chromosomes. At the onset of anaphase, it is ubiquitinated, conducting to its destruction and to the liberation of ESPL1. Its function is however not limited to a blocking activity, since it is required to activate ESPL1. Negatively regulates the transcriptional activity and related apoptosis activity of p53/TP53. The negative regulation of p53/TP53 may explain the strong transforming capability of the protein when it is overexpressed. May also play a role in DNA repair via its interaction with Ku, possibly by connecting DNA damage-response pathways with sister chromatid separation (By similarity). [UniProtKB/Swiss-Prot Function]